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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,088	12/30/2003	Mikko Jaakkola	KOLS.083PA	6864

7590 10/05/2005

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EXAMINER
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STEIN, JULIE E

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/748,088		JAAKKOLA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Julie E. Stein, Esq.		2685	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Determining Handover Based on State of Mobile Terminal.

### ***Claim Objections***

2. Claim 21 is objected to because of the following informalities: In claim 21, the terms, "the program code" in line 3 and "the computer software product", also in line 3 do not appear to have antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 21 recites a computer program product, however, program code is claimed. If this claim is meant to claim a product or an apparatus then elements of a product or an apparatus must be recited, program code portions do not constitute such elements. If this claim is meant to claim a program code, then it is indefinite as a program code is not one of the accepted types of invention.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 is directed to a computer program product, this is not statutory subject matter. If for example, the computer program were to be recorded on computer readable medium, then perhaps this 101 rejection could be overcome. See, MPEP, sec. 2106.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-4 and 8-14, 19, and 21 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over UK Patent Application GB 2289191 to "Motorola".

Motorola discloses all the steps of independent claim 1, including a method for applying a handover algorithm in a mobile terminal (abstract), wherein the handover algorithm is configured to select one of at least two available channels to be used for a connection from the mobile terminal (page 3, lines 5 to 11), and wherein a user interface component of the terminal may be set to an inactive state or to an active state (this is inherent to all mobile terminals, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that all mobile terminals have an active state in which, for example, a call is in progress (and for handover, a call must be in progress), and an inactive state, also known as an idle state), the method comprising: checking the state of the user interface component (this is also inherent as handover would not occur if a call was not in progress, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that a mobile terminal would check the state of the terminal or the user interface in order to determine if a call was in progress as handover would not occur if a call was not in progress), and applying the handover algorithm only when the current state of the user interface component is active (Id.).

The rejection of claim 1 is hereby incorporated. Motorola also discloses all the elements of independent claim 9, including a mobile terminal comprising a user interface and a handover algorithm (inherent based on the abstract), a user interface component of the terminal being adjustable in an inactive state or in an active state (this is inherent to all mobile terminals, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that all mobile terminals have an active

state in which, for example, a call is in progress, (and for handover, a call must be in progress), and an inactive state, also known as an idle state), wherein the terminal is configured to check the state of the user interface component (this is also inherent as handover would not occur if a call was not in progress, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that a mobile terminal would check the state of the terminal or the user interface in order to determine if a call was in progress as handover would not occur if a call was not in progress), and if the current state of the user interface component is active, the terminal is configured to apply the handover algorithm (Id.) configured to select one of the at least two available channels (page 3, lines 5 to 11) to be used for a connection from the mobile terminal.

The rejections of claims 1 and 9 are hereby incorporated. Motorola discloses all the elements of independent claim 21, including a computer program product for controlling a mobile terminal comprising a user interface and a handover algorithm by executing the program code included in the computer software product in a processor of the terminal (this is inherent as all mobile terminals have processors that run computer programs), wherein the computer software product comprises a program code portion for causing the terminal to check the state of the user interface component (see above), and a program code portion for causing the terminal if the current state of the user interface component is active (see above), to apply the handover algorithm configured to select one of the at least two available channels to be used for a connection from the mobile terminal (see above).

Motorola also discloses all the steps/elements of claims 2 and 10, including wherein the checking of the state occurs in response to changing the state of the user interface component. This is inherent in that if the mobile terminal goes from an inactive state to an active state, i.e. a call, which is necessary for handover, then the user interface would change, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that if the mobile terminal went from an inactive state to an active state, i.e. a change in state of the user interface, the mobile terminal would check this in order to determine if a call was in progress and ultimately to determine if handover was necessary.

Motorola also discloses all the steps/elements of claims 3 and 13, including wherein the checking of the state occurs in response to detecting a new available network resource. See, page 3, lines 30 to 31.

Motorola also discloses all the steps/elements of claims 4 and 14, including wherein the checking of the state occurs in response to a need to initiate the handover algorithm. See, page 4, lines 5 to 35.

Motorola also discloses all the steps/elements of claims 8 and 19, including wherein the handover algorithm determines a change between channels of different network technologies. Id.

Motorola also discloses all the elements of claims 11 and 12, including wherein the terminal is configured to initiate the handover algorithm in response to the change from the inactive state to the active state. This is inherent in that if the mobile terminal changes from an inactive state to an active state, i.e. a call, handover is required if the

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mobile terminal moves between cells/systems, alternatively, one of ordinary skill in the art at the time the invention was made would have understood that if the mobile terminal went from an inactive state to an active state, i.e. a call, the mobile terminal would apply the handover algorithm in order to determine if handover is necessary based on the location of the mobile terminal.

10. Claims 5 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola in view of U.S. Patent No. 6,178,388 to Claxton.

Motorola teaches all the steps of claim 5, except wherein the terminal comprises a body portion and a lid which is connected to the body portion and can be moved with respect to the body portion, and wherein the state of the lid in relation to the body portion is checked. But, Claxton teaches that flip phones are well known in the art and that when flip phones are in a closed position (the lid is down) that they are in an inactive state. See column 1, lines 47 to 59. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that flip phones are well known in the art as taught by Claxton and that the position of a flip phone would indicate the state of the phone as taught by Claxton and thus for purposes of handover the position would be checked to determine if a call was in progress.

Motorola teaches all the steps of claims 15 and 16, except wherein the terminal comprises a first portion and a second portion movable with respect to the first portion, and the terminal is configured to check the state based on the position of the second portion with respect to the first portion and that the terminal comprises a body portion and a lid which is connected to the body portion and can be moved with respect to the



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body portion, and the terminal comprises a sensing arrangement for detecting the state of the lid. But Claxton teaches that flip phones are well known in the art and that when flip phones are in a closed position (the lid is down) that they are in an inactive state. See column 1, lines 47 to 59. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that flip phones are well known in the art as taught by Claxton and that the position of the flip phone would indicate the state of the phone as taught by Claxton and thus for purposes of handover the position would be checked to determine if a call was in progress and that a sensing arrangement would be present to determine if the lid was in a closed or open position as this would indicate the state in which the phone was in as taught by Claxton. See column 1, lines 47 to 59.

11. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola in view of U.S. Patent Application Publication No. 2004/0204123 to Cowsky, III et al.

Motorola teaches all the steps/elements of claims 6 and 17 except, wherein the terminal comprises a keypad and a keypad locking functionality for locking the keypad, whereby the state of the keypad locking is checked. However, Cowsky teaches that it is well known in the art that mobile phones have keypads that may be locked and that when locked the phone is in idle or inactive mode. See paragraph 2. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to check the state of the keypad lock in order to determine the state of the phone because as taught by Cowsky, if the keypad is locked, then the phone is idle.

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12. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola in view of U.S. Patent Application Publication No. 2004/0248594 to Wren, III.

Motorola teaches all the steps/elements of claims 7 and 18 except, wherein the terminal comprises a screen saver functionality, the state of which is detected, whereby the state of the user interface component is inactive when the screen saver functionality is applied and the state of the user interface component is active when the screen saver functionality is not applied. However, Wren teaches that it is well known that mobile phones have screen saver functionality and that when screen savers are used that the mobile phones are in an inactive state. See paragraph 55. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to understand that to determine if the mobile phone was active, the screen saver could be checked because as taught by Wren, when the screen saver was in use the mobile phone was inactive and when the screen saver was not in use the mobile phone was active. See paragraph 55.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola in view of U.S. Patent No. 6,871,074 to Harris et al.

Motorola teaches all the elements of claim 20 except, wherein the terminal comprises a timer configured to determine the state of the user interface as inactive after a predetermined time period has elapsed after the latest user activity. However, Harris teaches that it is well known in the art that after a user has used a mobile terminal, if a given time period has elapsed, then the mobile terminal is transitioned to an off/inactive state. See abstract. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made, to understand that it is well known to use a timer to determine the state of a mobile terminal as inactive after a predetermined time period has elapsed as taught by Harris in order to conserve battery power.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie E. Stein, Esq. whose telephone number is (571) 272-7897. The examiner can normally be reached on M-F (8:30 am-5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JES

*Nguyen Vo*  
9-29-2005

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PRIMARY EXAMINER